

# 1. 74175 quad D flip flop ICs (total 3 used)

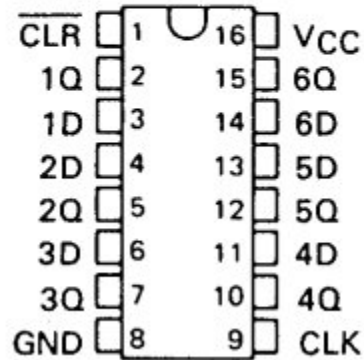
#SN74175N

SN54174, SN54LS174, SN54S174 . . . J OR W PACKAGE

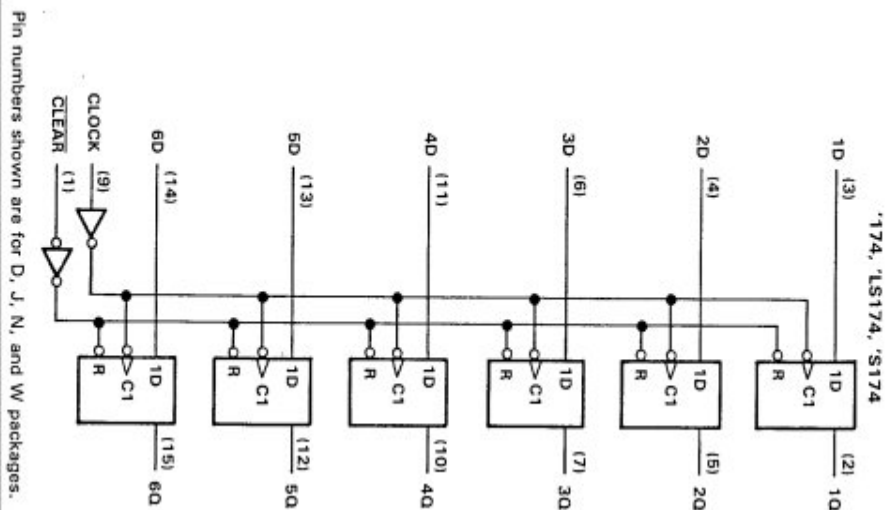
SN74174 . . . N PACKAGE

SN74LS174, SN74S174 . . . D OR N PACKAGE

(TOP VIEW)



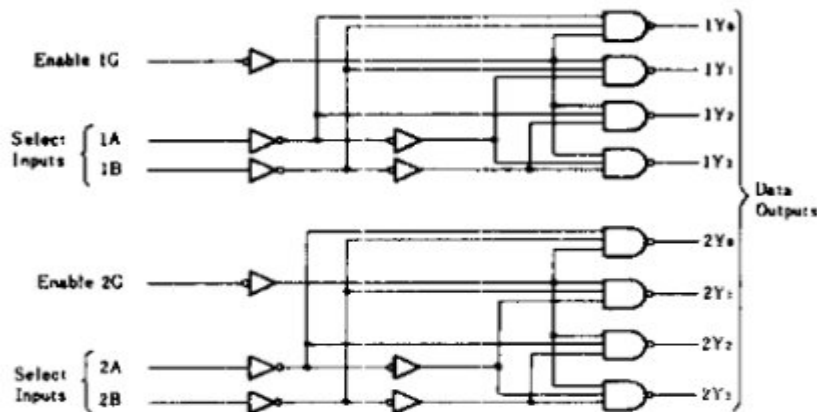
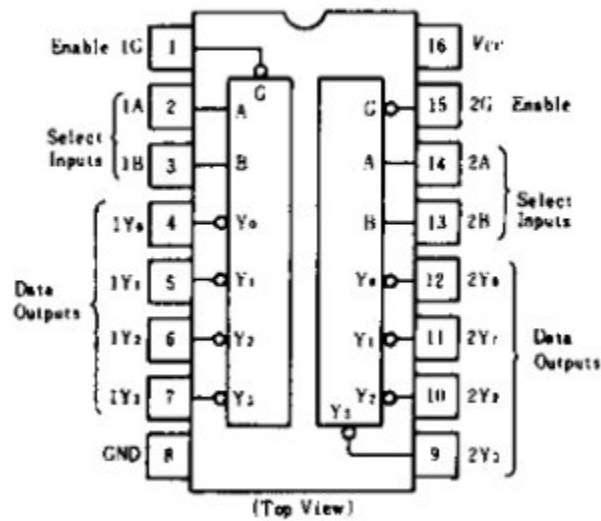
logic diagrams (positive logic)



## 2. 74139 1\*4 DeMux/Decoder IC (1 used)

#74139

### ■ PIN ARRANGEMENT



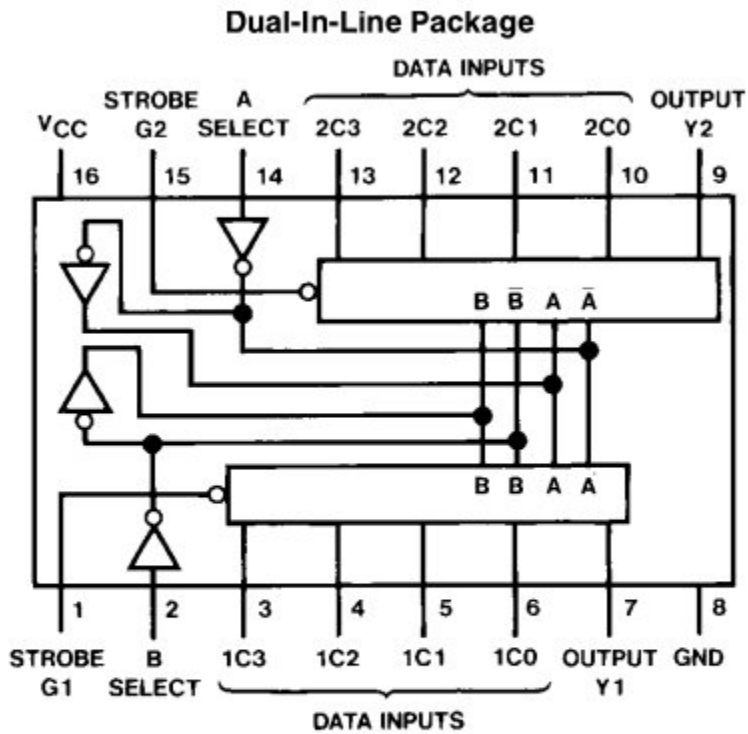
### ■ FUNCTION TABLE

Inputs			Outputs			
Enable	Select					
G	B	A	Y <sub>0</sub>	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>3</sub>
H	×	×	H	H	H	H
L	L	L	L	H	H	H
L	L	H	H	L	H	H
L	H	L	H	H	L	H
L	H	H	H	H	H	L

H; high level, L; low level, X; irrelevant

### 3. 74153 4\*1 Mux IC (total 4 used)

#### Connection Diagram



TL/F/6547-1

Order Number 54153DMQB, 54153FMQB, DM54153J,  
DM54153W or DM74153N  
See NS Package Number J16A, N16E or W16A

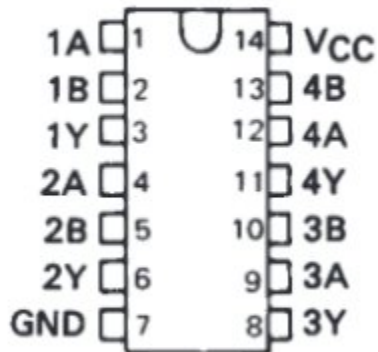
#### 4. 7408 quad AND gate (1 used)

SN5408, SN54LS08, SN54S08 . . . J OR W PACKAGE

SN7408 . . . J OR N PACKAGE

SN74LS08, SN74S08 . . . D, J OR N PACKAGE

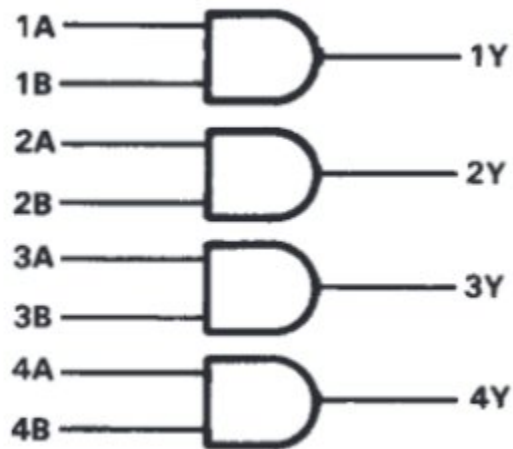
(TOP VIEW)



SN54LS08, SN54S08 . . . FK PACKAGE

(TOP VIEW)

logic diagram (positive logic)



$$Y = A \cdot B \text{ or } Y = \overline{\overline{A} + \overline{B}}$$

- 5. Push button pulse generator**
- 6. Jumpers and hook-up wires.**
- 7. Toggle Switches (total 6 used)**
- 8. LEDs (total 4 used)**
- 9. Breadboards (3 used)**